

Spiranthes infernalis Sheviak (1989)**ASH MEADOWS LADY'S TRESSES****FAMILY:** *Orchidaceae*, the orchid family.**SYNONYMS:** *Spiranthes romanzoffiana* var. *porrifolia* (misapplied)**STATUS:****Heritage Program SENSITIVE LIST, ranks: G1 S1****USFWS/ESA:** species of concern. **STATE OF NEVADA:** none. **BLM:** none. **USFS:** none.**NNNPS:** THREATENED.**POPULATION CENSUS:** 11 occurrences mapped at 1.0 km (0.6 mi) separation, OR 15 occurrences mapped at 0.16 km (0.1 mi) separation; total estimated individuals 1107+, total estimated area 11.4+ ha (28.2+ ac). **TREND:** unknown.**IMPACTS AND MAJOR THREATS:** Orchid collectors.**INVENTORY EFFORT:** Surveys are largely complete, but a few undocumented occurrences probably remain. Most recent entered survey 1998, average year of last survey 1991. **Years since last entered survey** (percent of mapped records at various survey ages): **0-5 yrs:** 6.7%; **6-10 yrs:** 20%; **11-20 yrs:** 73.3%.**LAND MANAGEMENT** in decreasing predominance: U. S. Fish and Wildlife Service, private lands.**RANGE:** Nye County, Nevada. Endemic to the Ash Meadows area. Maximum **range dimension 11.7 km (7.3 mi)** excluding most disjunct record. **Type specimen** collected in Nye County.**ELEVATIONS RECORDED:** 2190-2340 feet (668-713 meters).**HABITAT:** Permanently to seasonally wet alkaline meadows, often near the edges of spring outflows, in the creosote-bursage and shadscale zones with *Eleocharis rostellata*, *Fimbristylis thermalis*, *Juncus balticus*, *Distichlis spicata*, *Spartina gracilis*, *Anemopsis californica*, *Centaurium namophilum*, *Grindelia fraxinopratensis*, *Mentzelia leucophylla*, *Cordylanthus tecomensis*, *Lythrum californicum*, *Schoenus nigricans*, *Prosopis pubescens*, *Tamarix ramosissima*, *Fraxinus velutina*, *Sporobolus airoides*, *Helianthus nuttallii*, *Thelypodium integrifolium*, etc. Aquatic or wetland-dependent.**PHENOLOGY:** flowering late-spring to summer. Range of most frequent **survey months:** June-August.**LIFE-FORM AND HABIT:** tuberous perennial herb.**DESCRIPTION:** An herbaceous, small-flowered orchid. Flowers are yellowish white, green at the base.**Distinguishing features:** Must be distinguished with care from *Spiranthes porrifolia*, *S. diluvialis*, and *S. romanzoffiana*.**PHOTOGRAPHS:** Nevada Natural Heritage Program slide collection (1986-present) and files.**ILLUSTRATIONS:** Sheviak (1989).**OTHER GENERAL REFERENCES** (listed separately): Beatley (1976).**SPECIFIC REFERENCES:**Sheviak, C. J. 1989. A new *Spiranthes* (Orchidaceae) from Ash Meadows, Nevada. *Rhodora* 91: 225-234.Threlloff, D. 1990. Status Report on Ash Meadows lady's tresses (*Spiranthes infernalis*). Las Vegas, Nevada: U. S. Fish and Wildlife Service. 16 pages.**OF FURTHER INTEREST:** Described in *Rhodora* 91 (867):225. 1989.